

**TECHNICAL REVIEW AND EVALUATION  
OF APPLICATION FOR  
AIR QUALITY PERMIT NUMBER 45659  
MUSKET CORPORATION**

**I. INTRODUCTION**

This Class II renewal permit for Operating Permit No. 26889 is issued to Musket Corporation, the Permittee, for operation of a Bulk Fuel Transfer Terminal located in Winslow, Arizona. The facility has two fuel storage tanks, one for gasoline and the other for diesel fuel; a tanker loading facility and flare system for destruction of vapors during gasoline loading operations.

**A. Company Information**

Facility Name: Musket Corporation

Mailing Address: P.O. Box 26210  
Oklahoma City, OK 73126

Facility Address: 1620 Coopertown Road  
Winslow, AZ 86047

**B. Attainment Classification**

The facility is located in attainment area for all criteria pollutants.

**C. Learning Sites Evaluation**

In accordance with ADEQ's "Environmental Permits and Approvals Near Learning Sites" Policy, the Department is required to evaluate if any nearby learning sites would be adversely impacted by the facility. Learning sites consist of all existing public schools, charter schools and private schools at the K-12 level, and all planned sites for schools approved by the Arizona School Facilities Board. The learning sites policy was established to ensure that the protection of children at learning sites is considered before a permit approval is issued by ADEQ.

The Department identified 7 learning sites within two miles of the facility:

1. Northern Arizona Academy for Career Development
2. Washington School
3. Bonnie Brennan School
4. Winslow High School
5. Winslow Junior High School
6. Jefferson Elementary School
7. Winslow Residential Hall

At the time of modeling analysis performed during the processing of minor permit revision No. 37728 in October 2006, ADEQ reviewed the numerical modeling of the emissions from the facility. ADEQ then compared the results of the modeling analysis to air quality standards and relevant guidelines established to be protective of human health. The results of the modeling demonstrated that the air emissions from the facility were below the standards and guidelines. As a result, ADEQ has determined that the operation of the facility will not adversely affect the learning sites.

**D. Background Information**

The facility is currently operating under Permit No. 26889, issued on March 13, 2003. The facility was initially designed to receive, store, and load 80,000,000 gallons of product per year (35,000,000 gallons of gasoline and 45,000,000 gallons of diesel fuel). The facility was issued a minor permit revision No. 37728 on October 12, 2006, authorizing increase in throughput to 300,000,000 gallons/year (100,000,000 gallons/year of gasoline and 200,000,000/year gallons of diesel).

**II. FACILITY DESCRIPTION****A. Process Description**

The facility is designed to receive, store, and load 300,000,000 gallons of product per year. This includes 100,000,000 gallons of gasoline and 200,000,000 gallons of diesel fuel. The facility receives gasoline and diesel fuel by rail tank cars. Each 30,000 gallon tank car delivers approximately 27,500 gallons of product. Products are unloaded by 8 pumps (300 gallons per minute each). There are 2 dedicated unloading lines – 1 each for diesel and gasoline. The unloaded products are pumped to the gasoline and diesel storage tanks. The gasoline storage tank (671,178 gallons) is a vertical fixed roof tank equipped with an internal floating roof. The diesel storage tank (845,000 gallons) is a vertical fixed roof tank. The products are loaded into trucks using four 600 gallon per minute pumps and four loading arms. The loading rack can accommodate 20 trucks.

The facility is operated 24 hours per day, 365 days per year.

**B. Air Pollution Controls**

To destroy the vapors that escape during the loading of gasoline into the truck, the facility utilizes a vapor combustion unit (flare) with a combustion efficiency of 98%. The vapor combustion uses 92 cubic feet of natural gas.

**III. COMPLIANCE HISTORY**

There are no cases or alleged violations associated with the facility.

**IV. EMISSIONS**

Facility-wide emissions (after controls) are summarized in the following table.

Pollutant	Storage Tanks	Truck Loading	Total
	Tons per year	Tons per year	Tons per year
CO		12.52	12.52
NO <sub>x</sub>		5.01	5.01
VOC	2.44	6.08	8.52
HAPs	0.26	0.57	0.83

**V. APPLICABLE REGULATIONS**

The following table summarizes the applicable requirements:

**Table-2**

<b>Unit ID</b>	<b>Control Equipment</b>	<b>Applicable Regulations</b>	<b>Verification</b>
Gasoline storage tank	Internal Floating roof	40 CFR 60 Subpart Kb	40 CFR 60 Subpart Kb is applicable to gasoline storage tanks meeting the capacity and vapor pressure applicability requirements.
<b>Unit ID</b>	<b>Control Equipment</b>	<b>Applicable Regulations</b>	<b>Verification</b>
Gasoline distribution bulk terminal	Flare	40 CFR 63 Subpart BBBBBB 40 CFR 63.11(b) 40 CFR 63 Subpart A 40 CFR 60.502 and 60.503	This Subpart became effective on January 10, 2008, and is applicable to existing bulk terminals (gasoline storage tanks, loading racks, and vapor collection-equipped gasoline cargo tanks). The facility being existing source, is required to comply with the requirements under this Subpart no later than January 10, 2008.
Diesel storage tank, flare system	N/A	A.A.C. R18-2-730	These requirements for unclassified sources are applicable to diesel storage tank and flare system.
Fugitive dust sources	Water and other reasonable precautions	A.A.C. R18-2, Article 6, A.A.C. R18-2-702	These are applicable to fugitive dust sources at the facility.
Mobile sources	Water Sprays/Water Truck for dust control	A.A.C. R18-2, Article 8	This Article is applicable to off-road mobile sources, which either move while emitting air pollutants or are frequently moved during the course of their utilization.
Other periodic activities	N/A	A.A.C. R18-2-730 A.A.C. R18-2-1101.A.8	This section deals with activities such as sandblasting, demolition/renovation asbestos control, and gaseous or odorous materials handling.

**VI. PREVIOUS PERMIT AND PERMIT CONDITIONS****A. PREVIOUS PERMITS****Table 3: PREVIOUS PERMITS**

<b>Permit No.</b>	<b>Issue Date</b>	<b>Application Basis</b>
26889	March 13, 2003	Class II Operating Permit
37552	October 12, 2006	Minor Permit Revision

**B. PREVIOUS PERMIT CONDITIONS****Table-4**

<b>Condition # in permit no. 26889</b>	<b>Determination</b>				<b>Comments</b>
	Delete	Kept	Revise	Streamline	
Attachment "A"			x		This Attachment has been revised and most recent Attachment "A" is used for this permit.
Attachment "B"					
Section I	x				The SIP requirement for installation permit is deleted, as this is an operating permit.
Condition II.A		x			This applicability requirement for gasoline storage tank is retained as Condition II.A.
Condition II.B.1		x			The requirements for internal floating roof tank are relocated under Condition II.C.1.
Condition II.B.2	x				This requirement for dock loading facilities is not valid for this facility and, hence, deleted.
Condition II.B.3		x			This requirement to prevent emissions from pumps is renumbered as Condition II.B.2.
Condition II.C.1		x			This requirement for keeping records of the dimensions of the gasoline storage tank is relocated as Condition II.C.4.a
Conditions II.C.2 and II.C.3	x				This requirement of maintaining records of the vapor pressure for gasoline storage tank is not applicable to internal floating roof storage tank as per 40 CFR 60.116b(g) and, hence, deleted.

**DRAFT**

Condition # in permit no. 26889	Determination				Comments
	Delete	Kept	Revise	Streamline	
Conditions II.D.1, 3 and 4		x			The testing requirements for the gasoline storage tank are retained under Condition II.C.3.
Condition II.D.2	x				This testing requirement for liquid mounted or mechanical shoe seal is deleted, as the tank is equipped with double seal system.
Condition II.D.5		x			This notification requirement is relocated as Condition II.B.1.
Section II.E		x			The reporting and record keeping requirements for the gasoline storage tank are relocated under II.C.4.
Section III			x		The requirements under 40 CFR 60.18 for flares are not applicable as the internal floating roof gasoline storage tank (NSPS) is not connected to a flare. Thus these requirements are deleted. However, the requirements under NESHAPS 40 CFR 63.11b shall become applicable on January 10, 2008, due to applicability of 40 CFR 63 Subpart BBBBBBBB from that date. Thus, these requirements are included under Section IV of the new permit.
Section IV		x			The “Non-point Source Requirements” are renamed as “Fugitive Dust Requirements” and are relocated under Section V.
Section V		x			The mobile source requirements are relocated under Section VI.

**VII. MONITORING, RECORD KEEPING AND REPORTING REQUIREMENTS****A. Gasoline Storage Tank**

The Permittee is required to perform inspections as required by 40 CFR 60.113b(a). The Permittee is required to keep records of all inspections performed on the internal floating roof equipped gasoline storage tank related to seals, floating roof, fittings etc. If any defects are found during the inspections, the Permittee must report to the Director within 30 days of inspection about the nature of defects, the reasons why it did not meet the specification, and the repairs made.

**B. Flare**

The Permittee is required to operate the flare at all times. The flare pilot flame must be monitored using a thermocouple or an ultraviolet beam sensor, installed in close proximity to the pilot flame.

## DRAFT

### VIII. NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAPS) REQUIREMENTS

The facility is subject to the NESHAPs requirement under 40 CFR 63 Subpart BBBBBB. The facility is required to comply with the requirements under this Subpart not later than January 10, 2011. These requirements are applicable to gasoline storage tank, loading racks and flare system. Thus, the permit includes all the requirements under this subpart.

### IX. LIST OF ABBREVIATIONS

A.A.C.....	Arizona Administrative Code
ADEQ.....	Arizona Department of Environmental Quality
AQD.....	Air Quality Division
CO.....	Carbon Monoxide
HAP.....	Hazardous Air Pollutant
hr.....	Hour
NAAQS.....	National Ambient Air Quality Standard
NO <sub>x</sub> .....	Nitrogen Oxide
PM.....	Particulate Matter
PM <sub>10</sub> .....	Particulate Matter Nominally less than 10 Micrometers
PTE.....	Potential-to-Emit
SO <sub>2</sub> .....	Sulfur Dioxide
TPY.....	Tons per Year
VOC.....	Volatile Organic Compound
Yr.....	year